

From: Dawn Kolkman
To: Shea, Valois
Cc: Scott Bakken; Paul Goranson
Subject: Comment on Dewey-Burdock Draft Area Permit No. SD 31231-000
Date: Monday, June 19, 2017 4:56:25 PM
Attachments: Energy Fuels Comments on EPA Dewey Burdock Class III Draft Area Permit No. SD31231-000.pdf
Importance: High

Ms. Shea,

Attached please find Energy Fuels Resources comments on the EPA's Dewey-Burdock Class III Draft Area Permit No. SD 31231-000.

Regards,

Energy Fuels Resources (USA) Inc.

Dawn Kolkman

Permitting Manager

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June 19, 2017

Valois Shea
U.S. EPA Region 8
Mail Code: 8WP-SUI
1595 Wynkook Street
Denver, CO 80202-1129

Re: Comments on Dewey-Burdock Class III Draft Area Permit No. SD 31231-000

Dear Ms. Shea,

On behalf of Energy Fuels Resources (USA), Inc. (Energy Fuels), we appreciate the opportunity to comment on the EPA's Dewey-Burdock Uranium In-situ Recovery (ISR) Draft UIC Class III Area Permit. Energy Fuels is a domestic uranium mining company, and we own and operate the last operating uranium mill in the United States, the White Mesa Mill in Southeast Utah. We also own and operate two in-situ uranium recovery operations, the Nichols Ranch Uranium Project located in Central Wyoming, and the Alta Mesa Uranium Project in South Texas. Energy Fuels employs 116 people in the states of Arizona, Colorado, New Mexico, Texas, Utah and Wyoming.

As an experienced operator of uranium in-situ projects we have serious concerns with the EPA's Draft UIC Class III Area Permit. The EPA draft, as presented, contains requirements far exceeding those established in 40 CFR 144.33. Energy Fuels primary concerns lie with the following overarching issues presented in EPA's draft,

1. Insertion of permit conditions that are duplicative of proposed rules currently in the rulemaking process.
2. Misapplication of the regulatory requirements set forth in 40 CFR §144.12(b) and 40 CFR §142.
3. Overlap and Exceedance of the Nuclear Regulatory Commission's (NRC) authority as defined in the Uranium Mill Tailings and Recovery Act and existing rules.

Permit Conditions that are Duplicative of Current Rulemaking

In Part I, page 1, paragraph 2, first sentence, the EPA draft permit states, *"Because this permit authorizes more than one injection well, it is an Area Permit and subject to the requirements found at 40 CFR §144.33"*. That is a true statement; however, EPA has no authority to place additional requirements extending beyond those established in the cited regulation. EPA appears to be attempting to insert; and thus set a precedent for the inclusion of proposed regulations presently described in 40 CFR 192 (*Proposed Rule – Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings* (Federal Register/Volume 82, Number 12/ Monday, January 19, 2017)). At this time, no other ISR Company is required to meet these proposed permit conditions in States with primacy over UIC programs under §144.33. A side-by-side comparison between the draft permit and the proposed revisions to 40 CFR §192 are remarkably similar, and yet, the proposed revisions to §192 remain "proposed" and still subject to the full rulemaking process before becoming final. EPA should revise the draft permit to incorporate only the applicable rule requirements rather than creating requirements that could be counter to future rule changes.



An example of EPA's backdoor approach to implementing unapproved regulations, by inserting duplicative permit conditions, is found in Part IV of the draft. Per the draft permit 'post-restoration' it is to be completed following approved restoration by the NRC. While the draft permit does not contain any specific requirements directing the Dewey Burdock project to conduct restoration, the EPA is directing additional 'post-restoration' work above and beyond what is currently required by NRC regulations and the source material license issued by the Commission.

Furthermore, Part IV of the draft permit includes a requirement to install a Down-Gradient Compliance Boundary. The Down-Gradient Compliance Boundary is an additional string of monitor wells located between the production area and the monitor well ring. To this unjustified requirement, for installation of an additional set of monitoring wells, the EPA has attached an entirely new set of baseline monitoring, excursion monitoring, a new and separate point of compliance, and therefore an additional set of restoration requirements; all of which is completely duplicative and overlapping with the NRC license and Commission decisions.

Misapplication of 40 CFR §144.12(b) and 40 CFR §142

Part IX, Section E of EPA's draft permit also addresses 'post-restoration' monitoring, indicating it is required to demonstrate no ISR contaminates cross the aquifer exemption boundary into the surrounding USDW's at a concentration above the baseline water quality limits of the USDW outside the aquifer. Again, this monitoring is outside current approved regulation. Interestingly, the monitoring requirements appear to be an application of 40 CFR §144.12(b), even though it isn't cited in the document, and it has been misinterpreted and therefore misapplied. 40 CFR §144.12(b) actually states:

"...if any water quality monitoring of an underground source of drinking water indicates the movement of any contaminant into the underground source of drinking water, except as authorized under part 146, the Director shall prescribe such additional requirements for construction, corrective action, operation, monitoring, or reporting (including closure of the injection well) as are necessary to prevent such movement. In the case of wells authorized by permit, these additional requirements shall be imposed by modifying the permit in accordance with §144.39, or the permit may be terminated under §144.40. If cause exists, or appropriate enforcement action may be taken if the permit has been violated."

40 CFR §144.12(b) indicates that modifying a permit to include additional monitoring is done only as a consequence of negative monitoring results for a USDW outside of the aquifer exemption; whereas, EPA is requiring all of the additional monitoring at the start of mining. It is obvious this regulation, as written, has a specific course of action by which negative results must be demonstrated, which then triggers a consequence and/or corrective action (i.e. additional monitoring). For the EPA to "pre-impose" a regulation without cause, thus adding exorbitant costs to a start-up project, is inappropriate.

Another part of 40 CFR §144.12 the EPA has omitted is the language from 40 CFR §144.12(a) which states:

"...if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR §142 or may otherwise adversely affect the health of persons."

§144.12(a) is important because of its relationship with 40 CFR §142, and should be cited in the draft permit document. 40 CFR §142 not only includes the national drinking water standards but also the application of MCL's



that must be considered when applying the standard, "*may otherwise adversely affect the health of persons.*" EPA's misinterpretation gives the appearance of selectively applying regulation by only allowing baseline as the criteria and disallowing the use of MCL's which form the standard used for protection of human health.

This is evident with EPA's statement, "*to demonstrate that no contaminants cross in the aquifer exemption boundary*" in reference to Table 13 that contains 45 contaminants, accounting for all major cation and anions known to commonly occur in natural groundwater systems. The requirement to meet baseline for 45 contaminants is an interesting imposition considering the EPA itself doesn't believe waste fluids are being injected into the exempted aquifer as cited in the EPA Draft Aquifer Exemption, Record of Decision (ROD), page 18, Ensuring Protection of Adjacent USDWs, referencing EPA guidance #34 which states:

"...if the exemption pertains to only a portion of an aquifer, a demonstration must be made that the waste will remain in the exempted portion. Such a demonstration should consider among other factors, the pressure in the injection zone, the waste volume, and injected waste characteristics (i.e., specific gravity, persistence, etc.) in the life of the facility. Given the nature of the ISR operation, waste fluids are not being injected into the exempted portion of the aquifer."

Overlap and Exceedance of NRC Authority

The Uranium Mill Tailings Radiation Control Act (UMTRCA) grants EPA the authority to promulgate *generally applicable standards* (not regulation). The NRC then enacts and enforces regulations to conform to the generally applicable standards. The requirements in Part IV and Part IX of this draft, which are provided for under the guise of 40 CFR §144.33, not only overlap the NRC regulations but exceed the EPA's authority under UMTRCA. Stringent requirements for *all* groundwater restoration of ISR wellfields already exist per NRC authority under 10 CFR §40 Appendix A which states:

"Under the existing requirements in Appendix A of 10 CFR Part 40, the staff will apply the Criterion 5B standards in evaluating all ISR groundwater restoration plans currently under review or submitted in the future. This policy includes reviews of applications for new ISR facilities, reviews of restoration plans at existing, licensed ISR facilities, and review of ISR license renewal applications."

Criterion 5B(5) goes on to say:

"At the point of compliance, the concentration of hazardous constituents must not exceed-
(a) The Commission (NRC) approved background concentration of that constituent in the ground water;
(b) The respective value given in the table in paragraph 5C if the constituent is listed in the table and if the background level of the constituent is below the value listed; or
(c) An alternate concentration limit established by the Commission (NRC)."

Implementation of restoration requirements are presented in NRC Regulatory Issue Summary 2009-05 Uranium Recovery Policy Regarding (1) The Process for Scheduling Licensing Reviews of Applications for New Uranium Recovery Facilities, and (2) the Restoration of Groundwater at Licensed Uranium In Situ Recovery Facilities (April 29, 2009). This publication is a public document available on the NRC Adams site Accession Number ML083510622. Knowing this poses several concerns about the EPA's document:



1. The EPA is imposing a 'post-restoration' requirement when *ALL* restoration (that would include this idea of 'post restoration') is covered by NRC regulations. To reiterate, 'post-restoration' requirements are contained in proposed, not approved, regulation.
2. Referring again to Table 13, containing 45 contaminants (to be at baseline, without consideration of MCL's), is an overreach of authority knowing the NRC addresses contaminants in 10 CFR Part 40, Appendix A, Table 5C *maximum values for groundwater protection*. (By the way, even in EPA's proposed rulemaking for 40 CFR §192, (January 19, 2017) the EPA reduced the number of contaminants down to 12, therefore this EPA draft permit exceeds its own proposed regulation.)
3. The EPA has added these requirements without a clear understanding of the risks or benefits of implementation and even acknowledges ISR doesn't inject waste per the Draft Aquifer Exemption ROD statement "*waste fluids are not being injected into the exempted portion of the aquifer*". Therefore, since waste isn't being injected the risk of contamination is very low. Additionally, considering the draft permit requirements mimic EPA's proposed revisions for 40 CFR §192, a review of rulemaking shows the EPA acknowledges,

"the Agency does not have sufficient information to document a specific instance of contamination of a public source of drinking water caused by an ISR."

And further states,

"the EPA is unable to quantify the potential benefits."

In conclusion, it is Energy Fuels opinion that EPA should revise the draft permit with conditions that are limited to those requirements specifically described in 40 CFR §144.33. EPA should remove any overlapping and/or additional restoration requirements that come under the purview of UMTRCA and NRC. Nor should the draft permit contain requirements currently in the rulemaking process, and EPA should rely on the rulemaking process to determine the requirements of the final rule.

Energy Fuels appreciates the opportunity to comment on the Dewey-Burdock uranium in-situ recovery (ISR) draft UIC Class III Area Permit.

Sincerely,

A handwritten signature in dark ink, appearing to read 'William Paul Goranson'.

(on behalf of William P. Goranson)

William Paul Goranson,
Executive Vice President ISR Operations
Uranerz Energy Corporation (an Energy Fuels Company)

WG/dk